

### **REMARKS**

Claims 16-58 have been cancelled. Claims 1, 59, and 69 have been amended. New claims 70-74 have been added. Applicant asserts that the amendments and new claims find support at, e.g., the drawings, claims, and elsewhere in the application as filed, whereby no new matter is added. Claims 1-15, 59-67, and 69-74 are pending in the application. Entry of the amendments is respectfully requested. Favorable reconsideration and allowance of this application is respectfully requested in light of the foregoing amendments and the remarks that follow.

#### **1. Claim Objection**

In the Office Action, the Examiner objected to claim 33 because the wrong status identifier was used. Claim 33 is now cancelled, whereby the issue is resolved.

#### **2. Claim Rejections Under 35 U.S.C. § 102**

In the Office Action, claims 1-3, 5-7, 10-15, 59, 60-62, and 64-67, and 69 were rejected under 35 U.S.C. §102(b) as being anticipated by Clay, U.S. Pat. No. 3,026,012 ('012). Claims 1, 5-7, 9, 11-15, 59-67, and 69 stand rejected under 35 U.S.C. §102(b) as being anticipated by Seufer, U.S. Pat. No. 5,816,466 ('466). Applicant herein amends claims 1, 59, and 69, obviating the rejections.

Amended claim 1 is directed toward a wire guide used with a weld wire drive assembly that includes a pair of radially aligned drive rolls. The drive rolls define a nip between them for interfacing with and driving the weld wire. The wire guide has an elongate body with *an elongate bore extending through its length*. An aperture extends transversely through elongate body, intersecting the elongate bore. The *elongate body is narrower than the drive rolls* and it extends continuously between the drive rolls, *laterally supporting the weld wire as it traverses the nip*.

Neither the '012 patent nor the '466 patent discloses, nor can they be modified to disclose, a wire guide **which is narrower than the drive rolls and laterally supports a weld wire as it traverses a drive roll nip.**

It is noted that the '012 fails to disclose driving a weld wire in any regard. It discloses devices for driving hardened steel wire against a tool, to deflect the hardened steel wire into a coil spring configuration. The '012 patent seeks to solve problems relating to machine reconfiguration require when changing a production run to accommodate hardened steel wire of a different diameter (Col. 1, Lines 55-57). It accomplishes this by providing a quill assembly (10) that is self aligning by way of, e.g., a two-part liner (16).

The two-part liner (16) defines an out-feed conduit that guides the spring steel toward a deflection tool (22). The liner (16) is specifically designed so that "no special adjustments need to be made to accommodate changes in wire diameter" (Col. 6, Lines 9-11). Thus, to accommodate hardened steel wire of differing diameters, only the quill assembly (10) is replaced and the replacement quill assembly (10) is easily and properly aligned by inserting it over the liner (16). In other words, the entire '012 patent focuses on components that are downstream of the driving event or roll nip, whereby the liner (16) only supports a wire **after it exits the rolls.**

The '466 patent discloses cooperating plates (44, 46) that in combination define a wire guide structure, i.e., guide plate assembly (36). Applicant respectfully yet strongly disagrees with the Examiner's characterization of a single plate, namely plate (44), being a wire guide. Plate (44) must be used in combination with 46 to suitably guide a weld wire. Furthermore, assuming, *arguendo*, that plate (44) is a wire guide, then it **does not and cannot have a bore extending along its length.** Rather, the plate (44) alone has an elongate channel, trough, or groove, or other "open sided" elongate depression. It is not circumferentially closed and thus cannot be a bore.

Regardless, under no interpretation of the '466 can the wire guide assembly (36 or plate (44)) **laterally support a weld wire as it traverses a drive roll nip.** The lateral supporting wire guiding channel is, by design, broken with no immediately and laterally adjacent guide structure.

The result is three distinct lateral support segments (62a, 62b, 62c) which are provided before and after, but not at, the drive roll nip(s) (FIG. 24).

Independent claim 1 is therefore believed to be novel (and non-obvious) over the cited prior art. Correspondingly, Applicant asserts that claims 2-15 are allowable as depending from allowable claim 1, as well as each on its own merits.

Amended claim 59 is directed toward a wire guide with an elongate body, an elongate bore that is circular in cross-section, is narrower than a drive roll, and has an aperture that extends into the bore and defines a continuous perimeter.

Neither the '012 patent nor the '466 patent discloses, nor can they be modified to disclose, a wired guide with a bore that is circular in cross-section, narrower than a drive roll, and include an aperture that defines a continuous perimeter extending into the bore.

The '012 patent discloses a wedge-type end on the liner (16). Since the material of the liner (16) does to extend through or beyond the roll nip, the rolls contact the wire through a U-shaped groove (as viewed from above), i.e., the U-shaped spaced between the tabs (74). Since the U-shaped groove is NOT a closed structure, it *cannot* be an aperture that defines a continuous perimeter.

Turning now to the '466 patent, as described above with respect to claim 1, the guide plate assembly 36 must be wider than the drive rolls used with the device. Furthermore, if one interprets plate 44 as being a wire guide, it cannot have a (an enclosed) bore, rather it has a groove or channel. A planar wall surface (50) of plate 46 provides the closure structure for the various distinct wire guide enclosure segments (62a, 62b, 62c). As seen in FIG. 26, it is noted that even when assembled, plate assembly 36 does *not* include a bore that is circular in cross-section. Rather, it includes at least one straight-line segment in its perimeter shape.

Independent claim 59 is therefore believed to be novel (and non-obvious) over the cited prior art. Correspondingly, Applicant asserts that claims 60-67 are allowable as depending from allowable claim 59, as well as each on its own merits.

Amended claim 69 is directed toward a wire guide that is *narrower than a guide roll* and has *a height dimension that varies along its length*. Along the entire length of the wire guide, *its height dimension is greater than the diameter of the weld wire*. Accordingly, when viewed in a side elevation, a weld wire extending through the wire guide of Applicant's invention would not be visible.

Neither the '012 patent nor the '466 patent discloses, nor can they be modified to disclose, a wired guide that is *narrower than a guide roll*, has *a height dimension that varies along its length*, such that along its entire length, *its height dimension is greater than the diameter of the weld wire*

The '012 patent discloses that the segment of liner (16) that is adjacent the rolls is shorter than the wire is tall, or the wire diameter. To illustrate the point, FIG. 7 shows that the wire (W) would clearly be visible from a side elevation.

As for the '466 reference, as stated before, the plate assembly 36 is wider than the drive roll. In the alternative, plate 44 does NOT have a bore, but rather a groove, channel, or other open structure.

It is therefore believed that claim 69 is novel (and non-obvious) over the cited references.

### **3. Claim Rejections Under 35 U.S.C. § 103**

In the Office Action, the Examiner rejected claims 4 and 8 under 35 U.S.C. §103(a) as being unpatentable over '466 in view of Gerould, U.S. Pat. No. 3,675,837 ('837).

Here too, the amendment to claim 1 obviates the rejections. The above discussion of the allowability of claim 1 in light of the '466 patent is equally applicable here with respect to the '466 patent as a primary reference. Accordingly, in the interest of brevity, that discussion will not be repeated here. Regarding the '837 patent, Applicant draws the Examiner's attention to, e.g., FIG. 2 that clearly show the wire guide as being wider than the drive roll(s). Applicant strongly asserts that two references showing wire guides that are wider than drive rolls, the '466

patent and the '837 patent, cannot be combined to somehow arrive at a wire guide which is narrower than the respective drive roll.

#### **4. New Claims**

New independent claim 70 is directed generally toward the subject matter of claim 1, where it is believed allowable over the references of record, only it defines the subject matter with even more specificity. Namely, claim 70 includes recitations of, e.g., an elongate body extending continuously between an input side of the drive rolls and an output side of the drive rolls for continuously laterally supporting the weld wire, and defining a uniform lateral clearance is between the weld wire and the elongate body, along the entire length of the elongate body. Claims 71-74 are allowable as depending from allowable independent claim 70, as well as each on its own merits.

#### **CONCLUSION**

It is submitted that claims 1-15, 59-67, and 69-74 are in compliance with 35 U.S.C. §§ 102 and 103 and each defines patentable subject matter. A Notice of Allowance is therefore respectfully requested.

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A fee in the amount of \$810 is believed do for the accompanying Request for Continued Examination (RCE, large entity). Authorization is given to charge the \$810 fee to Deposit Account No. 50-1170. No other fees are believed to be payable with this communication. Nevertheless, should the Examiner consider any other fees to be payable in conjunction with this or any future communication, the director is authorized to charge any fee or credit any overpayment to Deposit Account No. 50-1170.

The Examiner is invited to contact the undersigned by telephone if it would help expedite the prosecution and allowance of this application.

Respectfully submitted,



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